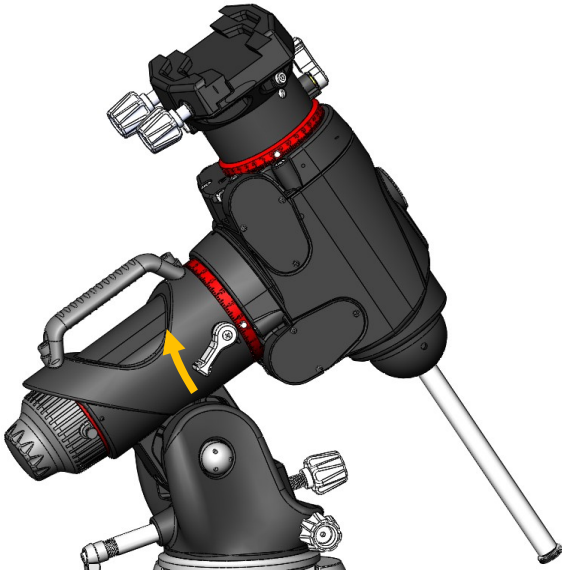


蜗轮蜗杆间隙调整方式 Backlash adjusting method

一、RA 方向蜗轮蜗杆间隙的调整 RA backlash adjusting method

1、将平衡杆保持在竖直方向，锁紧 RA 离合手轮（图 1）

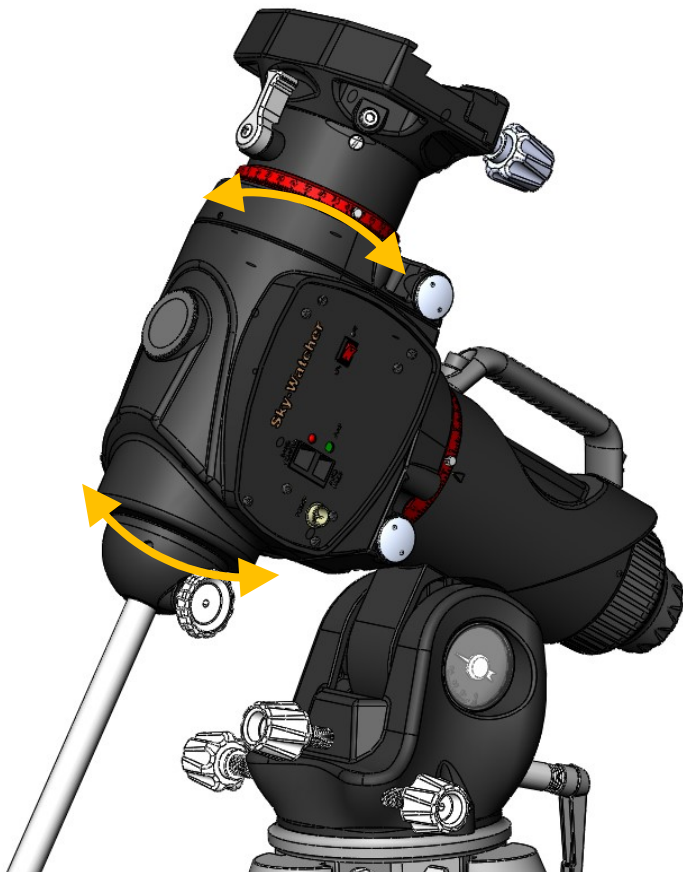
Maintain the balancing pole vertical, and then tighten the RA clutch knob. (Figure 1)



(Figure 1)

2、上下晃动 DEC 部分，感受此时 RA 蜗轮蜗杆的间隙状态（图 2）

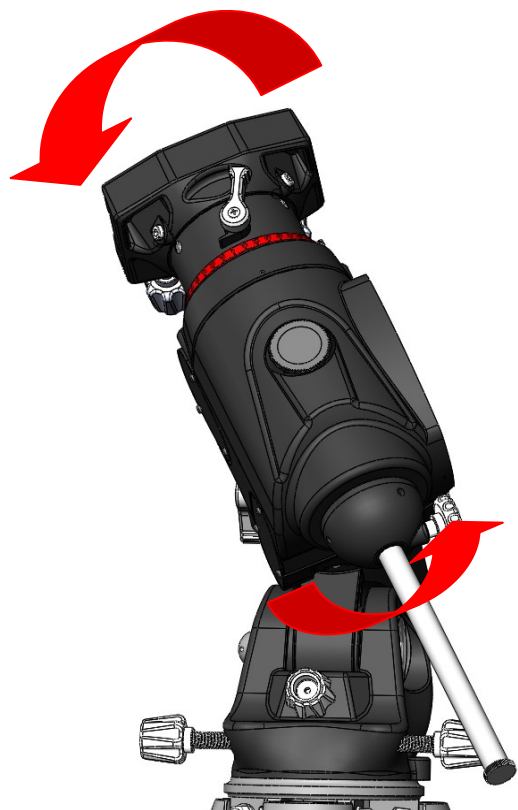
Shake the DEC part up and down, to feel the backlash status of RA worm and gear. (Figure 2)



(Figure 2)

3、将托架通电，用手控器转动 RA 马达，使 DEC 部分转动一个角度，停下，上下晃动 DEC 部分，感受此时 RA 蜗轮蜗杆的间隙状态（图 3）

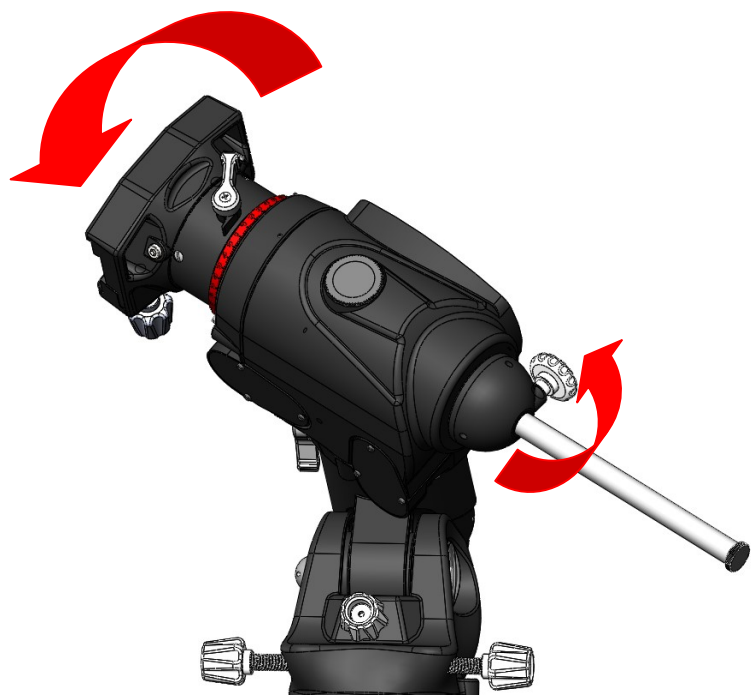
Power on the mount, rotate the RA motor through the hand controller, and make DEC part stop after turning to an angle. Shake the DEC part up and down, to feel the backlash status of RA worm and gear. (Figure 3)



(Figure 3)

4、朝同一个方向继续转动一个角度，停下，上下晃动 DEC 部分，感受此时蜗轮蜗杆的间隙状态（图 4）

Keep on turning towards one direction for an angle, and stop, shake the DEC part up and down, to feel the backlash status of worm and gear. (Figure 4)



(Figure 4)

- 5、照此步骤一直做下去，每转动一个角度停下感受一下间隙状态，直到整圈转完，记下间隙最小的位置，用手控器将蜗轮转动到此位置，再正反转反复转动一段角度，找出间隙最小的位置，下一步将在此位置调整间隙

Keeping doing this, feel the backlash status of worm and gear every time it turned to a new angle, until one complete circle is finished. Mark down the location of minimum backlash, and use the hand controller to turn the worm gear to this location. And then turn for an angle back and forth repeatedly, to find the location of minimum backlash. Adjust the backlash here.

注：每次转动的角度越小，越能准确地找出间隙最小的位置

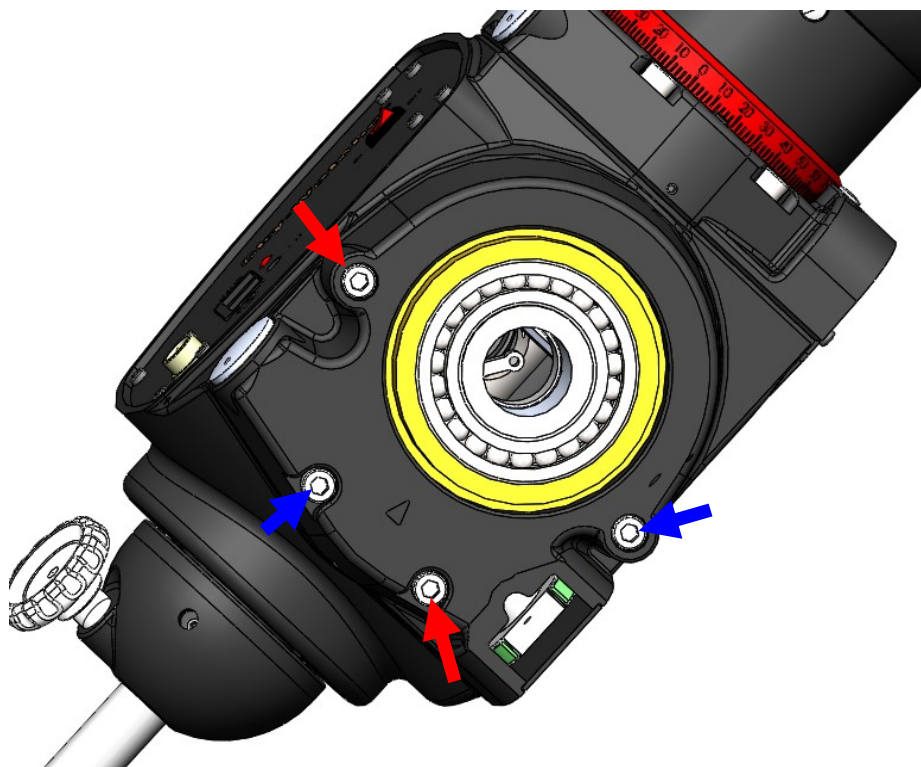
Attention: The smaller the twisting angle is, the more precisely the location of minimum backlash can be found.

- 6、松开 RA 蜗杆座上图 5 所示红色箭头处的 2 个螺钉，再将这两个螺钉轻微锁紧；然后松开蓝色箭头处的 2 个螺钉，再将这两螺钉轻微锁紧。

Loosen the 2 screws pointed by red arrows on Figure 5 on RA base, and then tighten the two screws slightly. Loosen the two screws pointed by blue arrows, and then tighten them slightly.

工具：4mm 内六角扳手

TOOL: 4mm allen wrench



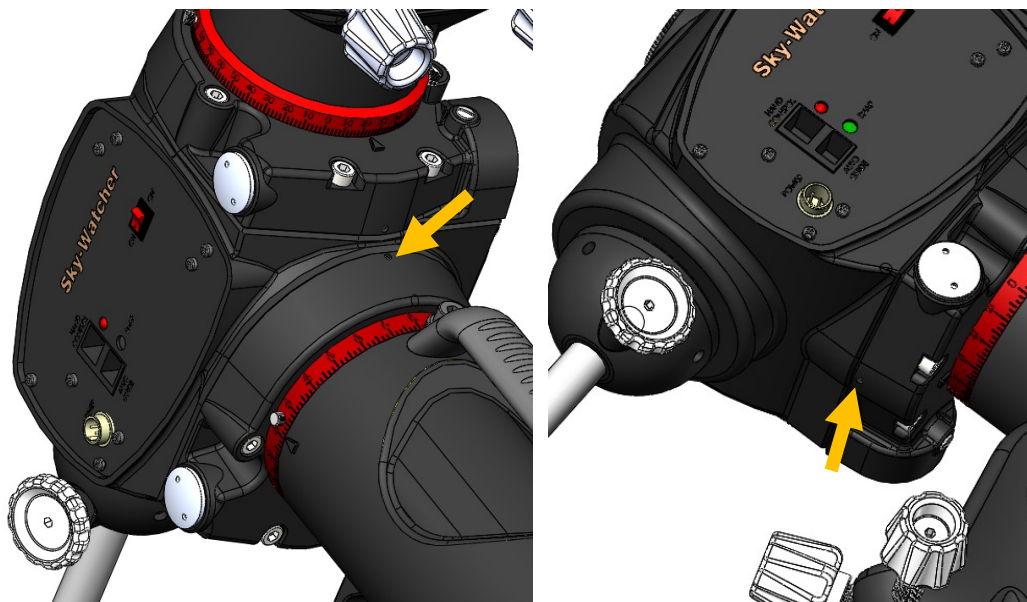
(Figure 5)

7、调整蜗杆座上下两个螺钉，用于调整蜗轮蜗杆的间隙，上侧的螺钉用于减小间隙，下侧的螺钉用于加大间隙（图6）

Adjust the two screws above and below the worm gear base. The upper one is for reducing the backlash, and the lower one is for increasing the backlash. (Figure 6)

工具：2mm 内六角扳手

TOOL: 2mm allen wrench



(Figure 6)

8、在第七步调整的过程中，不断晃动 DEC 部分，感受蜗轮蜗杆间隙的变化，直到调整到满意的状态，再将图 5 所示的四个螺钉完全锁紧

During step 7, keep shaking the DEC part to feel the backlash change, until you are satisfied. And then lock up the 4 screws in figure 5.

9、调整完成后，正反转转动 RA 方向各 2 圈，检查是否会卡死

After adjusting, turn in RA direction positively and negatively for 2 circles, to check if it will be jammed.

二、DEC 方向蜗轮蜗杆间隙的调整：方法与以上步骤相同

Backlash for DEC direction worm and gear adjusting method: Same as the above steps.